LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1-15. (Cancelled)
- 16. (Previously Presented) A thermal protection system, comprising:

 an insulating core comprising carbon foam produced directly from particulate coal having a thermal conductivity below about 1 W/m °K.
- 17. (Previously Presented) The thermal protection system of claim 16, wherein the carbon foam is a coal-based cellular foam.
- 18. (Cancelled)
- 19. (Previously Presented) A thermal protection system, comprising: an insulating core comprising carbon foam produced directly from particulate coal and having a density ranging from about 0.1 to about 0.8 g/cm³.
- 20. (Previously Presented) The thermal protection system of claim 16, wherein the carbon foam has a density ranging from about 0.1 to about 0.8 g/cm³.